F1

wherein the solid electrolyte has a cup-shape the heater is provided within the cup-shaped solid electrolyte, a clearance is formed between the heater and the internal electrode, said clearance being 0.1 mm or more.

15. (Amended) An oxygen concentration detector according to claim 12, wherein said material having a high emissivity has an emissivity of a ser more.

Claim 16, line 5, change "said surface" to --a surface--.

17. (Amended) An oxygen concentration detector according to claim 16, wherein said material [having a high emissivity] has an emissivity of 0.3 or more.

F3

18. (Amended) An oxygen concentration detector according to claim 1, wherein the thickness of the high-emissivity layer is [in the range of 5-20 μ m] 5μ m or more.

Kindly add the following new claim:

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--20. An oxygen concentration detector according to claim 18, wherein the thickness of the high-emissivity layer is in the range of 10-20 μ m.--